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# Digital Torque Translator

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## DIGITAL TORQUE TRANSLATOR

Submitted to Professor Dean E. Nold, Chairperson  
Department of Electrical Engineering Technology  
Indiana University-Purdue University at Fort Wayne  
April 24, 1981

By Joseph E. Slough  
To meet the Purdue University requirements for  
EET 491, Senior Design Project

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## ABSTRACT

Electrical Engineering Technology students will no longer receive inaccurate motor torque measurement readings when using the prony brake test equipment. The Digital Torque Translator takes the guess work out of torque tests by using four strain guages to convert mechanical pressure into electrical signals that are amplified, averaged, and translated into accurate digital torque readings. The Digital Torque Translator locks in and holds each torque measurement to provide the operator with steady readings that are not affected by machine vibrations. This device provides accuracy at a low cost and maintains its accuracy indefinitely, as it has no mechanical parts that may wear out or become weakened after prolonged use. Extensive testing has proven that the Digital Torque Translator is far more accurate and much easier to use than the mechanical gauge previously used for torque measurement.